IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TYLER DIVISION

NETWORK-1 TECHNOLOGIES, INC.

\$ CIVIL ACTION NO. 6:11-cv-492v. \$ RWS-KNM

\$ ALCATEL-LUCENT USA, INC., ET AL. \$

ORDER

Before the Court is Defendants' Motion to Exclude Certain Opinions and Testimony of Dr. James Knox. Doc. No. 821. The Court held a hearing on this Motion on June 1, 2017. The Motion is **DENIED**.

BACKGROUND

Plaintiff Network-1 Technologies, Inc. ("Network-1") accuses Defendants¹ of infringing U.S. Patent No. 6,218,930 ("the '930 Patent"). The '930 Patent relates to an apparatus and method for remotely powering access equipment over a 10/100 switched Ethernet network. *See* '930 Patent.

On June 2, 2016, the Court held a claim construction hearing on the disputed terms of the '930 Patent. The Court subsequently construed "low level current" to mean "a non-data-signal current that is sufficient to begin start up of the access device but that is not sufficient to sustain the start up." Doc. No. 693 at 12.

¹ All remaining Defendants in this case, with the exception of Juniper Networks, are parties to Sections I and II of this Order. All Defendants, including Juniper Networks, Inc. are parties to Section III of this Order. *See* Doc. No. 821 at 1 n.1.

Dr. Knox, Plaintiff's infringement expert, presents certain opinions regarding whether the Defendants' accused products infringe the asserted claims of the '930 Patent. Doc. No. 855, Ex. 3, Oct. 13, 2016 Expert Report of Dr. James M. Knox ("Knox's Report"). Defendants challenge these opinions under *Daubert*. Doc. No. 821.

APPLICABLE LAW

Daubert

Under Federal Rule of Evidence 702, a witness who is qualified as an expert by knowledge, skill, experience, training or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

The trial judge has a gate-keeping role to ensure that expert testimony is relevant and reliable. *Daubert v. Merrill Dow Pharm., Inc.*, 509 U.S. 579 (1993). Indeed, "[t]he proponent [of the expert testimony] need not prove to the judge that the expert's testimony is correct, but she must prove by a preponderance of the evidence that the testimony is reliable." *Moore v. Ashland Chemical, Inc.*, 151 F.3d 269, 276 (5th. Cir. 1998). "The reliability prong [of *Daubert*] mandates that expert opinion 'be grounded in the methods and procedures of science and . . . be more than unsupported speculation or subjective belief." *Johnson v. Arkema, Inc.*, 685 F.3d 452, 459 (5th Cir. 2012) (quoting *Curtis v. M & S Petroleum, Inc.*, 174 F.3d 661, 668 (5th Cir. 1999)).

Factors to consider in determining whether a proposed expert's methodology is scientifically valid or reliable are:

- (1) whether the expert's theory can be or has been tested;
- (2) whether the theory has been subject to peer review and publication;

- (3) the known or potential rate of error of the technique or theory when applied;
- (4) the existence and maintenance of standards and controls; and
- (5) the degree to which the technique or theory has been generally accepted in the scientific community.

See Daubert, 509 U.S. at 593–95. A court must decide whether the *Daubert* factors are appropriate, use them as a starting point, and then ascertain if other factors should be considered. *Hathaway v. Bazany*, 507 F.3d 312, 318 (5th Cir. 2007).

In *Kumho Tire Company, Limited v. Carmichael*, the Supreme Court applied the *Daubert* principles to technical or specialized expert testimony. 526 U.S. 137 (1999). The Court explained that the overarching goal of *Daubert*'s gate-keeping requirement is to "ensure the reliability and relevancy of expert testimony. It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Id.* at 152. A trial court has the discretion to exclude expert testimony if there is "simply too great an analytical gap" between the expert's reasoning and the conclusion. *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

"At base, 'the question of whether the expert is credible or the opinion is correct is generally a question for the fact finder, not the court." *Eidos Display, LLC v. Chi Mei Innolux Corp.*, No. 6:11-cv-201-JRG, 2017 WL 1079441, at *2 (E.D. Tex. Mar. 22, 2017) (quoting *Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1296 (Fed. Cir. 2015)). "Under Rule 702, the question is whether the expert relied on facts sufficiently related to the disputed issue." *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 856 (Fed. Cir. 2010), *aff'd*, 564 U.S. 91 (2011). "To properly carry this burden, the patentee must 'sufficiently [tie the expert testimony on damages] to the facts of the case." *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1315–16 (Fed. Cir. 2011) (citation omitted). "Questions about what facts are most relevant or reliable to calculating

a reasonable royalty are for the jury." *i4i Ltd. P'ship*, 598 F.3d at 856. "The jury [is] entitled to hear the expert testimony and decide for itself what to accept or reject." *Id*.

"Daubert and Rule 702 are safeguards against unreliable or irrelevant opinions, not guarantees of correctness." *Id.* at 854. Also, the "existence of other facts . . . does not mean that the facts used failed to meet the minimum standards of relevance or reliability." *Id.* at 855–56. For example, "any reasonable royalty analysis necessarily involves an element of approximation and uncertainty." *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1325 (Fed. Cir. 2009) (citation and internal quotation omitted).

Expert Opinion and Claim Construction

Under the infringement analysis, "the court first determines the meaning of disputed claim terms and then compares the accused device to the claims as construed." *Wavetronix LLC v. EIS Elec. Integrated Sys.*, 573 F.3d 1343, 1354 (Fed. Cir. 2009) (citation omitted). "The infringement inquiry compares properly construed claims with the accused product or process." *Atl. Thermoplastics Co., Inc. v. Faytex Corp.*, 974 F.2d 1299, 1300 (Fed. Cir. 1992) (citations omitted). An expert's infringement opinion must use "the claim construction adopted by the court." *Intellectual Sci. & Tech., Inc. v. Sony Elecs., Inc.*, 589 F.3d 1179, 1183 (Fed. Cir. 2009) (citation omitted).

"Expert testimony regarding whether an accused device falls within the scope of a court's claim construction is appropriate and raises a factual issue for a jury to resolve." *EMC Corp. v. Pure Storage, Inc.*, 154 F. Supp. 3d 81, 109 (D. Del. 2016) (citation omitted). Courts allow experts to testify regarding preferred embodiments to educate the jury about teachings of the patent itself. *See EMC Corp. v. Pure Storage, Inc.*, No. 13-1985-RGA, 2016 WL 775742, at *4 (D. Del. Feb. 25, 2016) (ruling that the defendant's experts "are not precluded from making any reference

whatsoever to patent specifications and commercial embodiments"); *see also SSL Servs.*, *LLC v. Citrix Sys.*, *Inc.*, 940 F. Supp. 2d 480, 492 (E.D. Tex. 2013) (denying motion for judgment as a matter of law and ruling that the defendant's "expert's testimony regarding the preferred embodiments amounted to nothing more than an effort to educate the jury about the teachings of the . . . patent"), *aff'd*, 769 F.3d 1073 (Fed. Cir. 2014).

However, "[e]xpert testimony based on an impermissible claim construction is properly excluded as irrelevant and on the basis that the evidence could confuse the jury. *EMC Corp.*, 154 F. Supp. 3d at 109 (citing *Liquid Dynamics Corp. v. Vaughan Co.*, 449 F.3d 1209, 1224 n.2 (Fed. Cir. 2006)). *See also Personalized User Model, L.L.P. v. Google Inc.*, No. 09-525-LPS, 2014 WL 807736, at *1–*2 (D. Del. Feb. 27, 2014) ("expert testimony inconsistent with the Court's claim construction is unreliable and unhelpful to the finder of fact" and should be excluded under the *Daubert* standard); *Chicago Mercantile Exch., Inc. v. Tech. Research Group, LLC*, 782 F. Supp. 2d 667, 673–74 (N.D. Ill. 2011); *Am. Med. Sys., Inc. v. Laser Peripherals, LLC*, 712 F. Supp. 2d 885, 900 (D. Minn. 2010); *Callpod, Inc. v. GN Netcom, Inc.*, 703 F. Supp. 2d 815, 821–22 (N.D. Ill. 2010); *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1321 (Fed. Cir. 2009); *CytoLogix Corp. v. Ventana Med. Sys., Inc.*, 424 F.3d 1168, 1172 (Fed. Cir. 2005).

"No party may contradict the court's [claim] construction to a jury." *Exergen*, 575 F.3d at 1321. See also LP Mathews LLC v. Bath & Body Works, Inc., 458 F. Supp. 2d 198, 210 (D. Del. 2006).

Apportionment for Standard Essential Patents

Title 35, section 284 of the United States Code provides that "[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer.

. ." Under § 284, damages awarded for patent infringement "must reflect the value attributable to the infringing features of the product, and no more." *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014).

That "the patent holder should only be compensated for the approximate incremental benefit derived from his invention" is "particularly true for SEPs [(standard essential patents)]." *Id.* at 1232). As *Ericsson* explains:

When dealing with SEPs, there are two special apportionment issues that arise. First, the patented feature must be apportioned from all of the unpatented features reflected in the standard. Second, the patentee's royalty must be premised on the value of the patented feature, not any value added by the standard's adoption of the patented technology. These steps are necessary to ensure that the royalty award is based on the incremental value that the patented *invention* adds to the product, not any value added by the standardization of that technology.

Id.

"[U]nder this apportionment principle, 'there may be more than one reliable method for estimating a reasonable royalty." *Commonwealth Sci. & Indus. Research Organisation v. Cisco Sys., Inc.*, 809 F.3d 1295, 1301 (Fed. Cir. 2015) (citing *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1315 (Fed. Cir. 2014), *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015)), *cert. denied*, 136 S. Ct. 2530, 195 L. Ed. 2d 859 (2016). For example, "a party may . . . estimate the value of the benefit provided by the infringed features by . . . comparing the accused product to non-infringing alternatives." *Apple Inc.*, 757 F.3d at 1315.

"This adaptability is necessary because different cases present different facts." *Commonwealth Sci. & Indus.*, 809 F.3d at 1301–02. "And as damages models are fact-dependent, '[a] distinct but integral part of [the admissibility] inquiry is whether the data utilized in the methodology is sufficiently tied to the facts of the case." *Id.* (citing *Summit 6*, 802 F.3d at 1296).

DISCUSSION

Defendants first move to strike Dr. Knox's opinions regarding infringement. Defendants assert that "Dr. Knox altered the Court's construction of 'low level current' and applied his altered construction in his infringement analysis of Defendants' accused products." Doc. No. 821 at 1. Specifically, Defendants contend that Dr. Knox erroneously opined that "start up" refers to a "process that includes detection." Doc. No. 821 at 1, 3, 6, 9. The Court analyzes this portion of Defendants' motion in two parts.

I. Whether "start up" refers to a process

Defendants first argue that Dr. Knox improperly interprets "start up" as a process. Doc. No. 821 at 3. Defendants first challenge Dr. Knox's testimony that:

Start-up in the context of Construction 3 [of "low level current"] is the start-up process . . . that includes start-up steps (i.e., step (a), step (b), and step (c) described above) rather than a single event.

Knox's Report at 232.

Defendants note that, at the *Markman* hearing, the parties disputed whether the construction of "low level current" should refer to a start up "process." Doc. No. 821 at 4, 5 (citing 6/2/2016 Hearing Tr., Ex. D (*Markman*) at 65:6–66:6; 69:9–70:5). Defendants note that the Court did not include the "startup process" limitation in its construction of "low level current." *Id.* at 6. Defendants thus urge that Dr. Knox "broaden[s] the scope of the construction to cover a multi-step 'process' that begins with a detection phase." Doc. No. 821 at 7 (emphasis omitted). Defendants conclude that "[b]ecause Dr. Knox's infringement opinions rely on a rejected construction of the term 'low level current,' his opinions on infringement are inadmissible." *Id.*

Plaintiff responds that "[b]ecause the Court's construction requires a current that will 'begin start up' but not 'sustain the start up,' the express language of the construction necessarily

means that 'start up' is not a singular point in time, but instead takes place over a period of time—
i.e., it is a process or series of events." Doc. No. 855 at 3.

Here, the Court's claim construction requires that a "low level current" be: (1) sufficient to begin start up of the access device; but (2) not sufficient to sustain the start up. Dr. Knox's opinion that "start up" is a process is not necessarily inconsistent with the Court's construction of "low level current." That the court did not include "process" in its construction—in spite of Plaintiff's suggestion at the hearing that the construction should include "process"—does not in and of itself render Dr. Knox's proposed construction irreconcilable with the Court's construction. *See* Doc. No. 821 at 5–7.

Instead, inherent in the Court's use of the phrases "begin start up" and "sustain the start up" in the construction of "low level current" is the notion that "start up" must occur over some period of time, i.e., cannot be purely instantaneous.

Defendants' reliance on a *Daubert* ruling in *Network-1 Security Solutions, Inc. v. Cisco Sys., Inc.* is inapposite. 6:08-cv-30, Dkt. No. 475 (E.D. Tex. June 20, 2010) ("the *Cisco Daubert* Order) (attached to Plaintiff's response brief as Exhibit 10, Doc. No. 855-9). In that case, the Court ruled that the expert testimony at issue "failed to properly read the Court's analysis in evaluating the Court's construction" because it "depart[ed] from the Court's construction of 'low level current' and restrict[ed] the Court's construction to the preferred embodiment disclosed in the '930 Patent." *Id.* at 5. Here, as discussed above, Defendants have not shown that Dr. Knox's interpretation is inconsistent with the Court's construction.

Moreover, the *Cisco Daubert* Order commented on Dr. Knox's testimony that "startup" is a process. Specifically, the *Cisco Daubert* Order separately addressed whether the following opinion of Dr. Knox's was impermissible: "[T]he 'start up' of a PD (access device) is the *process*

that it gets through as it proceeds from no power, to the point where it becomes fully operational (functions for its intended purpose)." *Cisco Daubert Order* at 6 n.3 (emphasis added). The Court found that this analysis was "consistent with the Court's analysis for and its construction of 'low level current'." *Id*.²

Thus, Dr. Knox's reference to "start up" as a process does not contravene this Court's claim construction. The Court denies Defendants' request to exclude it.

Defendants also challenge Dr. Knox's characterization of "start up" as a "process" in the context of the accused access devices.³ To the extent Dr. Knox opines that "start up" in the context of the accused access devices is a "process," Defendants have not shown that such opinions are inconsistent with the Court's claim construction. Whether the accused products infringe under the Court's claim construction is for the jury to decide. *See Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 806 (Fed. Cir. 2007) ("The resolution of some line-drawing problems . . . is properly left to the trier of fact.") (citing *PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998) ("[A]fter the court has defined the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact.")); *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1318–19 (Fed. Cir. 2016) (citing *PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998)). Defendants further submit that Dr. Knox also distinguishes "startup" as used in the IEEE standard for his

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² Here, although this Court's present construction for "low level current" is slightly different from the *Cisco* construction, this Court did not substantively depart from the *Cisco* construction in any manner relevant to the present motion.

³ Doc. No. 821 at 4 ("Dr. Knox further defines 'start-up' as: '[S]tartup is the process the PD goes through as it proceeds from receiving no power to the point where it becomes fully operational (i.e., functions for its intended purpose). *The start-up of the access device is a process or series of events (not a single event) that occurs before the access device functions or operates.*") (citing Knox's Report at 232) (emphasis Defendants').

understanding of what "start up" means in the Court's construction of "low level current." Here, too, Defendants have not demonstrated any inconsistency between such opinions and the Court's claim construction.

II. Whether "start up" includes detection, classification, and powering up

Defendants next argue that Dr. Knox has impermissibly testified that that the steps in "start up" refer to detection, classification, and powering up. *See generally* Doc. No. 821. According to Defendants, the Court did not include "commences with detection" in its construction of "low level current" despite Plaintiff's suggestion in that regard at the *Markman* hearing. *Id.* at 5.

Plaintiff responds that detection takes place during "start up." For support, Plaintiff states that "[i]n the preferred embodiment, begin start up and completed start up are two different events that book end the start up process, during which time detection occurs and operating power is applied." Doc. No. 855 at 5. Plaintiff states that "[t]he claim language and Court's constructions require that detection takes place during, not after, start up." *Id.* at 6. Plaintiff further submits that "detection occurs between begin start up (initiated by the low level current) and completion of start up (which occurs after operating power is provided remotely to the access device)." *Id.* at 7. Finally, Plaintiff relies on the specification of the '930 Patent, which Plaintiff argues unambiguously states that the "low level current" is used for detection. *Id.* at 7.

To the extent Dr. Knox opines that detection must happen during (contemporaneously with) start up, Defendants have not demonstrated any inconsistency with the Court's claim construction. As Plaintiff notes, this opinion finds support in the claim language and specification.

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⁴ Doc. No. 821 at 4 (". . . Dr. Knox distinguished 'startup' as used in the IEEE 802.3af standard for PoE with his understanding of what 'startup' means in the Court's construction of 'low level current': 'In the 802.3af Standard's documentation, the word "startup" is not used as it is in *the Court's definition to refer to the entire start up process, which necessarily includes detection*; it is used just for the final phase of start up (the ramping up of operational power.") (citing Doc. No. 821, Ex. C (Knox's Supplemental Report) (emphasis in original)).

The parties should note, however, that the Court's construction of "low level current" does not require that "start up" must have, as one of its steps, detection. Indeed, the claims separately require controlling power in response to a preselected condition of a sensed voltage level. See, e.g., '930 Patent at Cl. 6. "Start up" does not necessarily include a "detection" step; instead, what is detected is that start up begins but is not sustained, in response to the "low level current." See id.

Nonetheless, disputes regarding whether detection occurs in relation to start up in the accused instrumentalities are factual disputes for the jury to resolve at trial, not for the Court to resolve under *Daubert* or as a matter of claim construction. *See Acumed*, 483 F.3d at 806 (citing *PPG*, 156 F.3d at 1355); *Eon*, 815 F.3d at 1318–19 (citing *PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998)).

The Court **DENIES** Defendant's request to strike Dr. Knox's opinions applying "low level current."

III. Whether at least 50% of the benefit of PoE technology, as implemented in Defendants' Accused Devices, is attributable to the '930 patent.

Defendants contend that Dr. Knox's opinion that "at least 50% of the benefit of PoE functionality" is attributable to the '930 Patent should be excluded for several reasons. Doc. No. 821 at 12.⁵

Defendants first argue that Dr. Knox's opinion fails to apportion the value of the patented technology from the unpatented technology in the IEEE PoE Standards. Doc. No. 821 at 10–11.

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⁵ Relatedly, Defendants also argue that Network-1's damages expert, Robert Mills, has not provided an economic analysis apportioning the patented features from the unpatented features of the PoE standard in his reasonable royalty calculation. Doc. No. 821 at 10. Plaintiff responds that Mr. Mills has conducted an extensive apportionment analysis. Doc. No. 855 at 10–11. The Court does not address these arguments here, as they do not pertain to Defendants' Motion to Strike Knox's Testimony. Rather, the admissibility of Mr. Mills's testimony is disputed separately as to Defendants' Motion to Strike Mills's Testimony. Doc. No. 824.

Plaintiff responds that Dr. Knox considered which important aspects of PoE functionality were attributable to the '930 patent claims and which were attributable to the unpatented technology. Doc. No. 855 at 12.

Defendants also argue that Dr. Knox fails to apportion out key aspects of the claims that he admits the named inventors did not invent and already existed in PoE technology. Doc. No. 821 at 12. To this end, Defendants note Dr. Knox's admission that other components of the PoE System, such as Ethernet networks, switches, Ethernet cabling, access devices, power sources, and several forms of PoE, were not invented by the named inventors and already existed in PoE technology. *Id*.

Plaintiff responds that Dr. Knox properly apportioned the benefits of the patentent invention in the context of PoE functionality rather than in the context of all Ethernet technology. Doc. No. 855 at 14–15.

Dr. Knox provides an overview of PoE functionality provided by the '930 Patent. Knox's Report at 454. For example, Dr. Knox discusses five main functions of PoE, as outlined by IEEE Standards. *Id.* at 458. Dr. Knox also states that the '930 patent provides each of the five main functions of PoE. *Id.* at 457–58. Dr. Knox provides, in chart format, a comparison of how the defining characteristics of the IEEE Standard use Claim 6 of the '930 Patent. *Id.* Dr. Knox then concludes that at least 50% of the value and benefits of PoE is attributable to the '930 Patent. *Id.* at 458.

Dr. Knox also opines that the detection method claimed in the '930 Patent has substantial benefits over other potential detection methods. *Id.* at 233. Specifically, Dr. Knox's Report outlines advantages of the detection methods in the '930 Patent over other detection methods. Knox's Report at 438–54.

On balance, Dr. Knox has provided sufficient analysis to overcome Defendants' *Daubert* challenge. Defendants' motion in this regard is primarily a challenge as to the weight of Dr. Knox's apportionment analysis rather than its admissibility. Likewise, Defendants have failed to demonstrate anything impermissible about Dr. Knox's opinion being limited to the benefits of PoE functionality attributable to the '930 Patent in the context of PoE, not in the context of all Ethernet functionality.⁶

Defendants' motion to strike is denied as to Dr. Knox's apportionment analysis. The proper mechanisms for challenging Dr. Knox's opinions in this regard are cross-examination and presentation of contrary opinions and evidence. *See Daubert*, 509 U.S. at 596 ("Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.").

CONCLUSION

For the reasons stated above, the Court hereby **DENIES** Defendants' Motion to Exclude Certain Opinions and Testimony of Dr. James Knox. Doc. No. 821.

So ORDERED and SIGNED this 13th day of September, 2017.

K. NICOLE MITCHELL UNITED STATES MAGISTRATE JUDGE

⁶ Finally, Defendants argue that Dr. Knox has failed to account for the value attributable to standardization. Doc. No. 821 at 12. This particular "apportionment" concern potentially arises in the context of economic apportionment of damages in the context of widespread adoption of a standard. *See Ericsson*, 773 F.3d at 1232–33 ("Just as we apportion damages for a patent that covers a small part of a device, we must also apportion damages for SEPs that cover only a small part of a standard. In other words, a royalty award for a SEP must be apportioned to the value of the patented invention (or at least to the approximate value thereof), not the value of the standard as a whole."). *See also id.* at 1233 ("[T]he royalty for SEPs should reflect the approximate value of that technological contribution, not the value of its widespread adoption due to standardization."). Defendants have not demonstrated that this concern is applicable in the context of apportioning technical value.